

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 October 2005 (06.10.2005)

PCT

(10) International Publication Number
WO 2005/093179 A1

(51) International Patent Classification⁷: **E03F 5/10 //**
F15D 1/00, E03F 5/22

PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ,
TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
ZM, ZW.

(21) International Application Number:
PCT/SE2005/000366

(22) International Filing Date: 14 March 2005 (14.03.2005)

(25) Filing Language: Swedish

(26) Publication Language: English

(30) Priority Data:
0400628-4 15 March 2004 (15.03.2004) SE

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for all designations
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations
- of inventorship (Rule 4.17(iv)) for US only

Published:

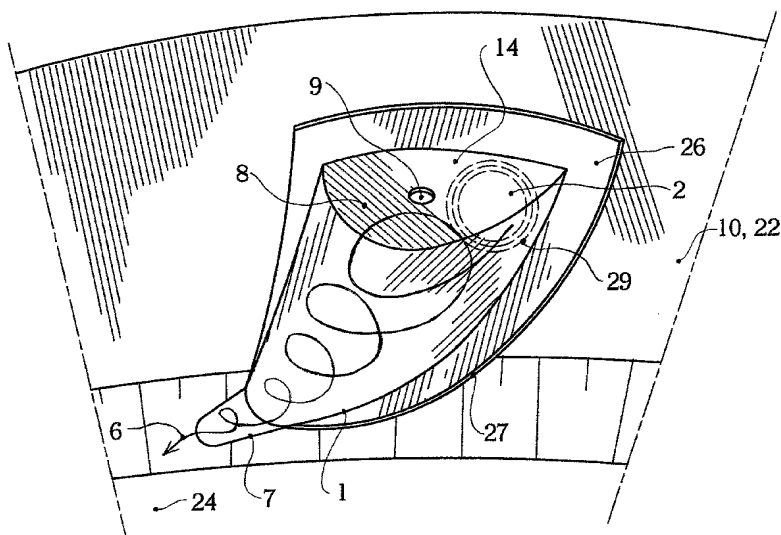
- with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(71) Applicant and
(72) Inventor: **PERSSON, Anders** [SE/SE]; Banjogatan 1., S-421 46 Västra Frölunda (SE).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,

(54) Title: SWIRL CHAMBER WITH MOVABLE NON-RETURN VALVE AND AIR INJECTOR FOR PREVENTION OF SEDIMENTATION IN STORM WATER AND WASTE WATER DRAINS



(57) Abstract: A device for preventing sedimentation by regulating the flow of waste water through drain draining-wells, with or without a pump, consisting of a swirl chamber (1) with connected outlet pipe (7) and provided with an air injector (3). The swirl chamber (1) which is tapered, generates a vortex flow in which the air added by the air injector (3) gives the sludge particles a certain amount of buoyancy, making it easier for them to accompany the water flow without being precipitated.

WO 2005/093179 A1